No. 23,426. PATENTED MAR. 29, 1859.

E. S. GARDNER.

MACHINE FOR PREPARING MOLDING FOR PICTURE FRAMES.

Fig. 1.

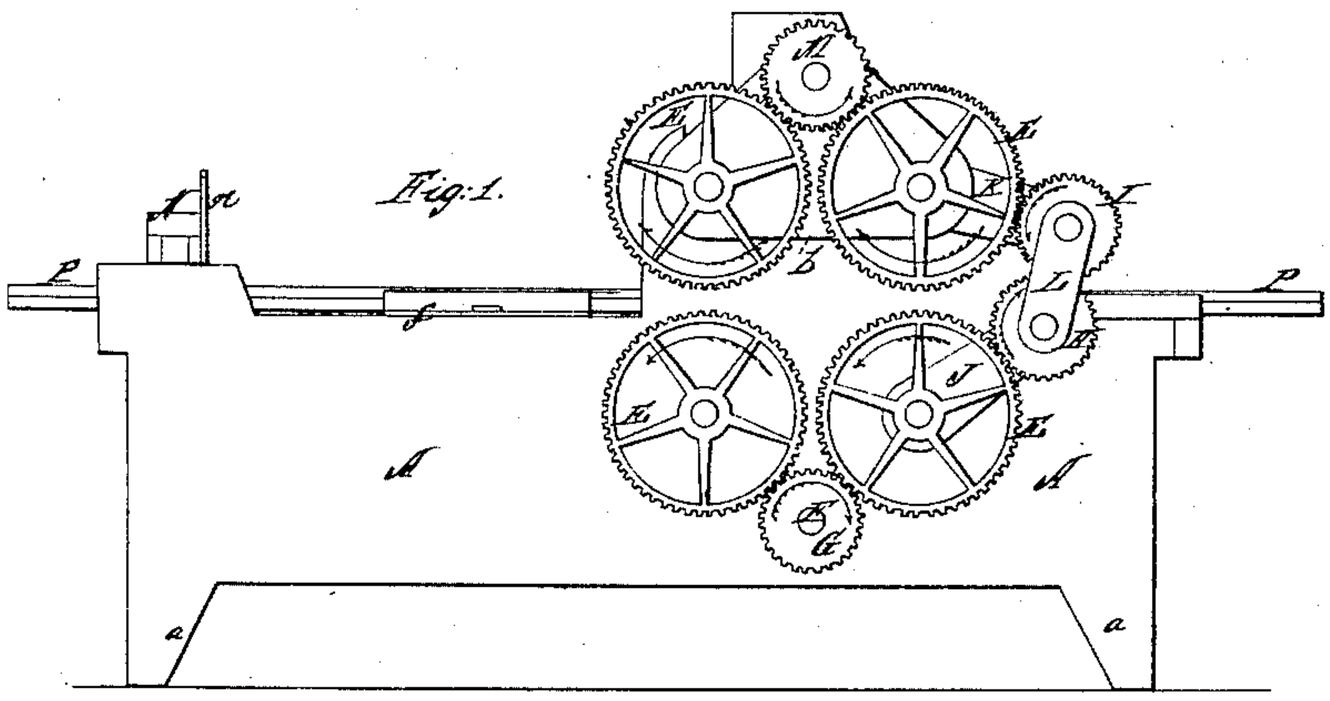



Fig. 2

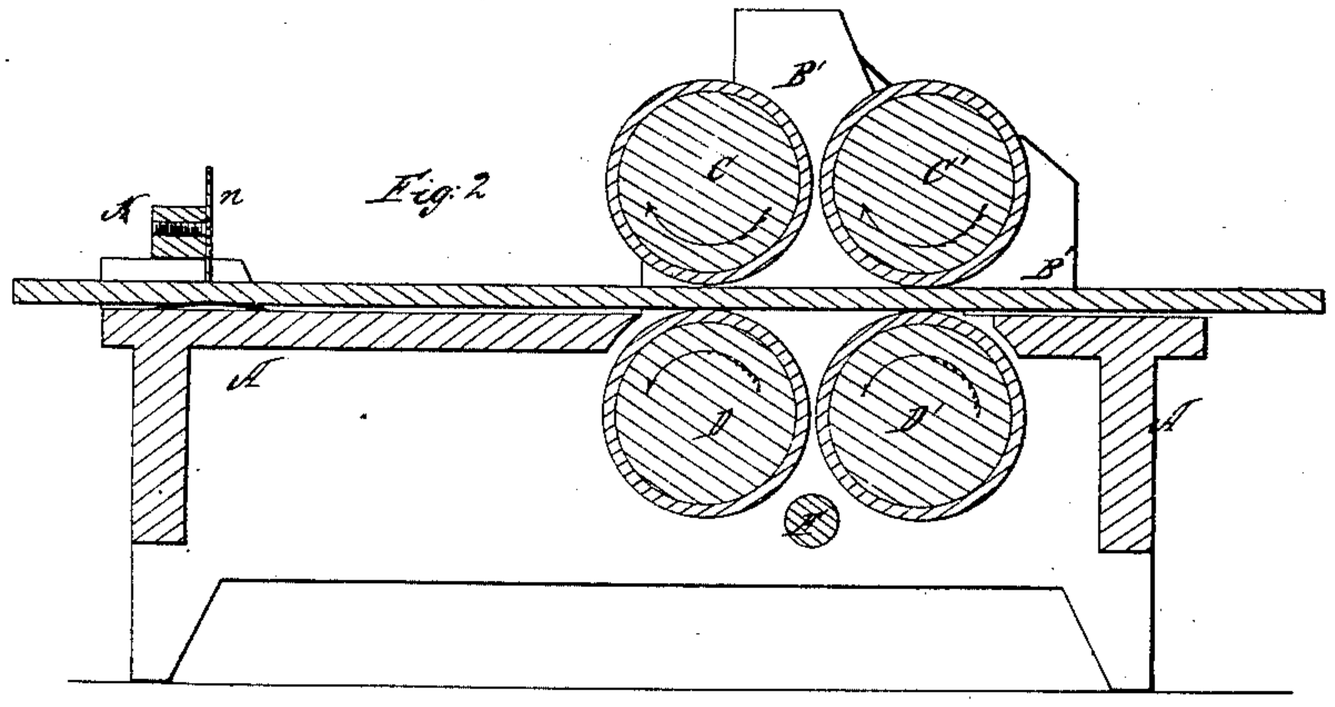
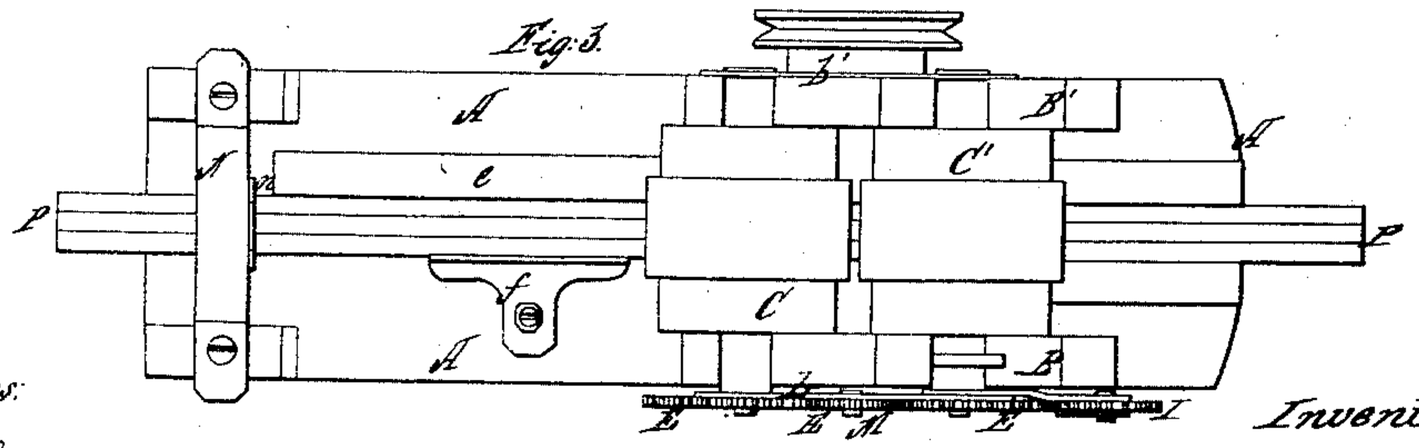



Fig. 3.




Witnesses:

Moses Gardner

Peter H Hinkle

Inventor:

Eleazar S Gardner

# UNITED STATES PATENT OFFICE.

ELEAZAR S. GARDNER, OF NEW YORK, N. Y., ASSIGNOR TO GARDNER & DECKER, OF SAME PLACE.

## MACHINE FOR PREPARING MOLDINGS FOR PICTURE-FRAMES.

Specification of Letters Patent No. 23,426, dated March 29, 1859.

*To all whom it may concern:*

Be it known that I, ELEAZAR S. GARDNER, of the city, county, and State of New York, have invented a new and useful Improvement in Machinery for Preparing Moldings for Picture-Frames; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing and to the letters of reference marked thereon.

My invention relates to improvements in apparatus for covering strips of moldings with coatings of cement, which, when dry, form the groundwork of the gilding, the said strips being subsequently cut into lengths, and used for the manufacture of picture frames; and my invention consists in certain revolving rollers, arranged and operating substantially as described hereafter, in combination with a scraper cut to the desired form of the molding, the said rollers serving to push forward the strips, one after another, and to pass them under the scraper, while the cement is applied to the moldings.

The object of my invention is to facilitate the laying on of the coats of cement, which has usually been accomplished by pushing the strips forward one after the other by hand, a process not only tedious, but one which is apt to impart irregularities to the surface of the cement, which should be uniform and smooth.

In order to enable others to make and use my invention, I will now proceed to describe its construction and operation.

On reference to the accompanying drawing, which forms a part of this specification; Figure 1, is a side elevation of my improved machine for preparing moldings for picture frames. Fig. 2, a sectional elevation, and Fig. 3, a ground plan.

Similar letters refer to similar parts throughout the several views.

A is a hollow frame, supported on legs *a*, *a*, and on each side of this frame are two standards B and B′, in which turn the journals of the rollers C and C′, the journals passing on one side through a plate *b*, and on the opposite side through a plate *b*′, the former plate fitting against the outside of the standard B, and the latter plate against the outside of the standard B′. The journals of two rollers D and D′, which are situated directly below the upper rollers C and C′, turn in the opposite sides of the hollow-frame.

A cog wheel E is secured to the portion of the journal of each roller, which projects beyond the frame.

F is the driving shaft, passing through and turning in the opposite sides of the frame, and on this shaft is a pinion G, which gears into both of the wheels E of the lower rollers D and D′.

H and I are two pinions in gear with each other, the pinion H also gearings into the wheel E of one of the lower rollers, and the pinion I gearing into that of one of the upper rollers. The spindle of the pinion H is carried on the end of an arm J, which is hung to the journal of the roller D′, and the pinion I is carried by an arm K, hung to the journal of the roller C′, the spindles of the two pinions being connected together by the link L. A pinion M, turning on a pin projecting from the plate *b*, gears into both of the wheels E of the two upper rollers, so that both may turn simultaneously in the same direction.

At the front end of the frame is secured a transverse bar N, to which is attached a metal scraper *n*, cut so as to be adapted to the desired figure of the molding to be prepared.

The upper rollers are situated so far above the lower rollers, that the molding P can pass between them, and each roller is covered with a band of gum elastic or other suitable yielding material, which bears moderately hard against the surface of the molding. A strip *e*, Fig. 3, is secured to the bed of the frame A, and to the same bed an adjustable strip *f* is attached, the two strips serving to guide the molding, as it passes from between the rollers, and before it comes in contact with the scraper.

The driving shaft is caused to revolve in the direction of the arrow, when, through the system of gearing already described, the whole of the rollers will revolve simultaneously in the direction of the arrows.

Two attendants are required for the machine, one stationed near the scraper to take care that a proper amount of the preparing material is applied to the molding at this point, and another attendant stationed at the rear of the machine, whose duty is to present a series of strips, one after the other, to the rollers.

A strip is placed on the bed at the rear of the machine, and pushed forward so that its end may enter the space between the rollers C′ and D′. The friction of the elastic surfaces on these two rollers will then draw the molding forward, until it passes between the rollers C and D, when the combined friction of the yielding surfaces of the four rollers will continue to force the molding along the bed of the frame, between the strips *e*, *f*. Before the molding arrives at the scraper, the preparing material is applied by a brush or other suitable instrument, and, as the molding is submitted to the scraper, the superfluous material is left behind, while sufficient adheres to the molding to form a uniform, smooth surface of the desired figure.

Before the rear end of the first molding has passed from between the rollers C′ and D′, a second molding is placed on the bed of the frame A, with its end against the rear end of the first, and, as the second molding is being submitted to the scraper and preparing material, a third molding is introduced, and so on, until the desired number of moldings have passed through the machine.

After the first coat of preparing material has become sufficiently dry, a second coat may be applied, by passing the molding through the machine as before; and thus coat after coat may be applied until the moldings have been covered with the requisite thickness of preparation, and until the desired smoothness and uniformity of surface has been attained.

In moldings of the smallest size, one upper and one lower roller only, with bands of yielding material, may be used, and for moldings of the largest size more than two upper and two lower rollers may be necessary. I therefore do not desire to confine myself to the use of four rollers only, nor to any particular mode of driving the said rollers, inasmuch as various devices might be employed for that purpose. But

I claim and desire to secure by Letters Patent;

The revolving rollers, arranged and operating substantially as described, in combination with the scraper *n*, for the purpose specified.

In testimony whereof, I have signed my name to this specification in the presence of two subscribing witnesses.

ELEAZAR S. GARDNER.

Witnesses:

MOSES GARDNER,

PETER H. HULL.